TUWA 18 TRAL

17

5

10

25

15 We claim:-

- A process for the preparation of polyurethane foams having improved long-term stability by reacting
- 20 a) polyisocyanates with
  - b) compounds having at least two hydrogen atoms reactive with isocyanate groups, in the presence of inhibitors in an amount of from 0.1 to 20% by weight, based on the weight of the polyurethane,

wherein the inhibitors are embedded in a substance which is inert under the conditions of the polyurethane preparation.

- 30 2. A process as claimed in claim 1, wherein the inhibitors are embedded in a wax.
- A process as claimed in claim 1, wherein the inert substances have a melting point such that they melt during the reaction which results in the polyurethane.
  - 4. A process as claimed in claim 1, wherein the inert substances have a heat of fusion of from 50 to 250 joules/gram.
- 40 5. A process as claimed in claim 1, wherein the melting point of the inert substances is from 20 to 150°C.
  - A process as claimed in claim 2, wherein the wax contains one or more polar groups.

45

- 7. A process as claimed in claim 1, wherein the inhibitors are selected from the group consisting of  $\alpha,\beta$ -unsaturated compounds, carboxylic acids, carboxylic acid derivatives, ketones or aldehydes, lactones, lactams and/or cyclic ethers, esters, sulfonic acids, cyclic sulfonic esters and/or sulfones, salts of metals of subgroups I, II and/or VIII and organic cyclic compounds, inorganic or organic acids and acid derivatives which can liberate acids in a hydrolysis process.
- 10 8. A process as claimed in claim 1, wherein the encapsulated inhibitors are present in particulate form.
  - 9. A process as claimed in claim 8, wherein the particles have a median particle diameter of from 20 to 800  $\mu m\,.$
- 10. A polyurethane which can be prepared by a process as claimed in any of claims 1 to 9.

Preparation of polyurethane foams having improved long-term stability

## 5 Abstract

Polyurethane foams having improved long-term stability are prepared by reacting

- 10 a) polyisocyanates with
  - compounds having at least two hydrogen atoms reactive with isocyanate groups, in the presence of inhibitors,
- 15 by a process in which the inhibitors are encapsulated in a substance which is inert under the conditions of the polyurethane preparation, in particular wax.

20

25

30

35

40

45